Hird About The Place

The Scene by Hird Newsletter.

Edition #5: October 2004

Dear Friends,

Spring's here - yippee! I don't know about you, but this is definitely my favourite time of the year in Kalgoorlie. The weather is agreeable and the landscape comes alive with colour. It makes me glad to be alive!

We've made it through our first year and it looks like we'll have many more – thanks for your support.

Enough waffling! Without further ado, let's get on with the newsletter:

A Photo Tip - The "Rule of Thirds"

Composition is one of the most difficult concepts in photography to grasp. It's also one of the hardest to teach, since there are no "rules" that work for all scenes and subjects.

When I discuss composition in my workshops, I teach people some of the commonly used techniques to improve their own composition. One of these techniques is known as the "Rule Of Thirds"

Simply stated, the scene is mentally divided into thirds, both vertically and horizontally as shown below.



The most interesting element of the scene is then placed on one of the imaginary intersections: in this case it was the bright green fern in the lower right. (Even more interest can be brought to a scene if points of interest can be placed on other intersecting lines.)

The theory behind the success of this rule is that it lets the mind of the viewer search the remaining image for things of interest. Placing the only point of interest in the centre of the frame does not encourage exploration of the scene. Such scenes look boring. (Please note: I do apologise if a review of your own photo album shows lots of boring photos perfectly-centred subjects Take heart though — centred subjects are exactly what Kodak recommends in their outdated guide books on photography!)

Having just told you to use the rule of thirds, I'm now going to encourage you to break it! As with all rules, this one made to be broken. By all means use it as a starting point for a composition, but departure from the rule will help you develop your own unique style.

Lightning*

As you may have noticed, I like to make photos of lightning. The subject itself is thrilling to chase, and the pictures are often spectacular. Four of our five most popular pictures are of lightning, so it seems to be a favourite subject of yours too.

Given the wide interest in the subject (and the fact that there was a storm keeping me awake last night, planting ideas in my head) I thought I might pass on some information I've gleaned over the years while researching this dangerous and spectacular natural phenomenon.

^{*}Warning: things get technical in this article and thus tend towards <u>boring</u>. Avoid the article if you value the state of consciousness you are currently enjoying

First, let me dispel a myth about our weather: The storms we get each summer in the Goldfields have absolutely <u>nothing</u> to do with the minerals in the ground. The miniscule increase in metal content in this area does not attract static electricity from passing clouds.

Thunderstorms result when moist, warm air mixes with dry, cool air. In the goldfields, that happens when low pressure troughs pass through in summer.



"Strike 3

There is still much debate over the actual mechanism driving the build-up of charge in clouds. The experts currently think electrons are stripped from the water and ice in the cloud via friction and dispersed into the atmosphere near the top of the cloud. This creates an area near the base of the cloud that is positively charged.

The strong charge in the cloud induces a negative charge in the ground below, "sucking" electrons from many points on the ground. The flow of electrons (i.e. electrical current) is happening for several seconds before the lightning flashes, and it happens over a wide area.

Any object projecting above the ground – a tree, a tower, a person – can provide a pathway for electrical flow, where electrons are jumping from the ground to the cloud. This can literally make your hair stand on end and make wires hum. There may also be a smell of ozone (like the smell of the dodgem cars or a power drill) when electrons are stripped from the oxygen in the air.

If you notice any of these things occurring while a storm is nearby, you are in **immediate** danger of being struck — the electricity is already flowing and it won't take much more for to escalate to dangerous levels.

The positive charge in the base of the cloud continues to build, pulling more and more electrons from the ground. Immediately before the main flash of lightning, current is being pulled from many places on the ground simultaneously. Small bolts of lightning called "stringers†" will form near the ground. When the flow of electricity reaches the critical level where it can overcome the insulating property of air, a massive discharge (a bolt of lightning) occurs through one of the stringers.

Stringers and their precursor currents can kill just as effectively as the main bolt. You don't need to be "struck by lightning" to be electrocuted.

The flash we see is the air being ionised – air becomes a better conductor in this state, so many pulses of electricity from the cloud make use of the pathway while it remains open. That explains why you often see several flashes of lighting in a second or so in the same place.

Once the cloud has dissipated some of its charge, the strokes of lightning stop and the cycle repeats.

The safest place for many of us to be in an electrical storm is the family car, but not for the reason many people think. The myth states that the rubber tyres prevent the car from being struck: this is not true – the car can still be hit. The car's metal cabin conducts the electricity into the ground without letting it pass through the occupants – that's handy to know when you're out camping and a storm approaches.

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[†] At the bottom centre of "Strike 3", there is a stringer visible. It might be a little hard to see at this scale – come in to the shop and have a closer look.

Some other safety tips:

- Rubber-soled shoes won't protect you. The bolt arcs though hundreds of metres of air (a good insulator): 1 cm of wet rubber is insignificant to several million volts of electricity.
- If you can hear thunder, you are within striking distance of lightning. If it starts raining, it's time to pack up the camera and get in the car lightning occurs most often where the rain is falling.
- If you are caught out in the open in a storm, crouch down with your feet together. Stay away from trees and other tall objects if they get struck, electricity can travel through the ground for up to 30m. Besides, trees often explode when they get struck and blow over in the gust front of a storm.
- When at home, stay inside and away from windows, power accessories and plumbing.
 One of our visitors in the gallery told us he was thrown across the kitchen while doing the dishes during a storm. That's a good excuse to stay away from dirty dishes at all times, I reckon! ©.

In some respects, lightning is like my lovely wife, Michelle: beautiful to look at and listen to, but dangerous if not respected (oh boy – am I in trouble for that simile! Ouch! They're both quick and unpredictable too!!!!! Ouch – I'm going to shut up now)

Seriously though, if you do decide to go out in a storm, err on the side of caution: no activity is worth dying for, even getting great photos. I believe what I've said in this article to be true, but please don't take <u>anything</u> I write to be gospel. If you use any advice I've given, don't hold me responsible if you still end up getting zapped!

Photography Workshops

The first of the SLR workshops is on 15/10/04. It's designed for beginners who are having problems understanding how their camera works and also would like to know more about composition.

I'll explain the so-called "rules" of composition, the basics of exposure control and lens optics during the theory session (Friday night). On the Saturday afternoon, we'll go out for a practical session, where I'll help each photographer understand their own camera's peculiarities. I'm supplying one film for this, including processing. On the following Tuesday night we'll meet up again for a critique/appraisal session of the photos taken and answer any lingering questions. Photographers with digital SLR cameras are most welcome.

The cost will be \$95 and classes are limited to 12 people. Others will follow soon after, so if you'd like to attend a workshop, give us a call and put your name on the list.

The first workshop (held last month) was specifically for absolute beginners. The people who attended told me they got a lot out of it. Corinna said "it was perfect for [her] level of understanding" and that she'd "recommend it to anyone".

Photo of the Month

October's shot is one of the Canadian Lakes that featured in last month's newsletter. I hope you like it. November's photo is going to be a previously un-printed lightning photo I've been sitting on since December last year.

(If you didn't receive the sample print with the newsletter, it'll be due to your reluctance to subscribe. Geez - it's only \$29.50! What's holding you up? C'mon - it helps pay for this newsletter and that's gotta be worth some small change from the coin jar on top of the fridge, surely? Yeah, ok, I see your point - maybe the subscription's not such a good idea, after-all ①)

That's all for October's newsletter – just a short one this month. I hope you enjoyed reading it; I've enjoyed writing it (even with the bruises I copped at the end of the lightning article)

Cheers,

